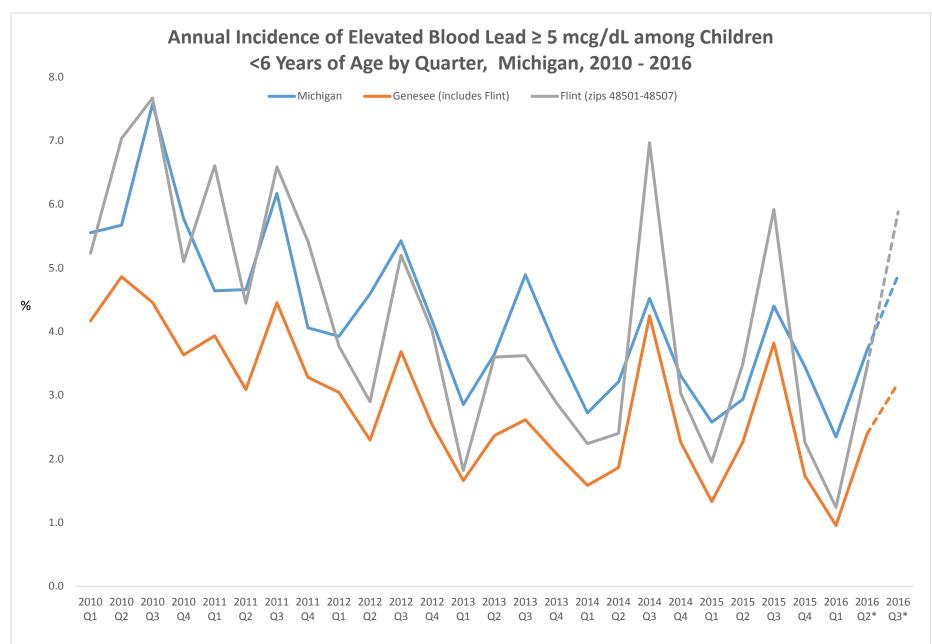


## Michigan Department of Health and Human Services (MDHHS) Blood Lead Level Test Results for Selected Flint Zip Codes, Genesee County, and the State of Michigan Summary as of October 14, 2016

## **Executive Summary**

This report is generated by MDHHS to track Blood Lead Level test results in Flint, Michigan.

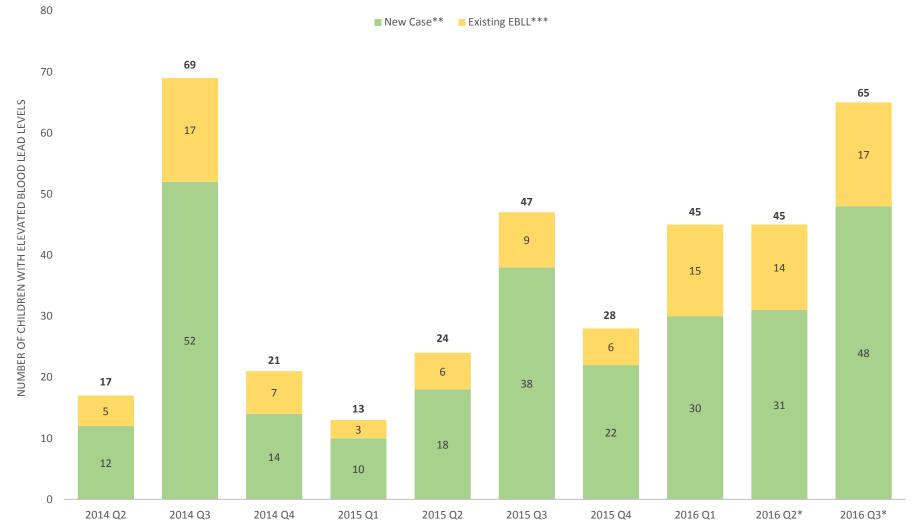
- Blood lead level testing is an important part of our efforts to identify people who have been harmed by drinking water that contained lead. However, MDHHS recognizes that the full community of Flint must be the focus of the public health response.
- People who have had multiple tests are counted only once per year for the annual counts. People counted in 2015 who were tested again after 1/1/2016 are counted in both years.
- Counts on this report include both capillary and venous blood tests.
- As of 5/2/2016, this report will no longer include test results for "Additional Impacted Locations" (48509, 48519, 48529, and 48532) because it has been demonstrated by CDC geographers that almost none of the addresses in these areas are serviced by water from the Flint River.
- Between 10/1/2015 and 10/14/2016, an additional 30,135 people were tested in Flint zip codes 48501-48507.
- Continued testing efforts by Genesee County Health Department, MDHHS, and local medical personnel have identified 219 children under age 18 in Flint zip codes 48501-48507 with blood lead levels greater than or equal to 5 mcg/dL (micrograms lead per deciliter of blood) since 10/1/2015.
- Of children younger than 6 years old tested between 10/1/2015 and 10/14/2016, 2.5% from Flint zip codes 48501-48507 had blood lead levels greater than or equal to 5 mcg/dL.
- Seventeen of the 65 (26.2%) children younger than 6 years old from Flint zip codes 48501-48507 with an elevated blood lead level (tested between 7/1/2016 and 9/30/2016) in Quarter 3 of 2016 had a previous test result greater than or equal to 5 mcg/dL.



<sup>\*</sup>Data for Quarters 2 and 3 of 2016 are incomplete and subject to change. Data for Quarter 4 of 2016 will be presented when the quarter is complete.

People who have had multiple tests are counted only once per year for annual counts. People counted in 2015 who were tested again after 1/1/2016 are counted in both years. Counts on this report include both capillary and venous blood tests.

## Elevated Blood Lead Levels (≥5 mcg/dL) among Children <6 Years of Age by Quarter, Flint (48501-48507), 4/1/14 - 10/14/16



- \* Data for Quarters 2 and 3 of 2016 are incomplete and subject to change.
- \*\* Child has never had a previous elevated blood lead level
- \*\*\* Child has a pre-existing elevated blood lead level that has not yet been brought down to <5 mcg/dL

People who have had multiple tests are counted only once per year for annual counts. People counted in 2015 who were tested again after 1/1/2016 are counted in both years. Counts on this report include both capillary and venous blood tests.

Table 1. Incidence of elevated blood lead levels (≥ 5 mcg/dL) among children less than 6 years of age, 2010 – 2016

		Michigan	Genesee County	Flint 48501-48507
1/1/2010 to 12/31/2010	Total tested for lead	156,014	7,053	3,630
	Number of test results ≥5 mcg/dL	9,754	306	230
	Percent of test results ≥5 mcg/dL	6.3%	4.3%	6.3%
	Total tested for lead	152,333	6,760	3,145
1/1/2011 to 12/31/2011	Number of test results ≥5 mcg/dL	7,571	252	182
	Percent of test results ≥5 mcg/dL	5.0%	3.7%	5.8%
	Total tested for lead	149,037	7,152	3,198
1/1/2012 to 12/31/2012	Number of test results ≥5 mcg/dL	6,832	210	130
	Percent of test results ≥5 mcg/dL	4.6%	2.9%	4.1%
	Total tested for lead	148,400	7,132	3,142
1/1/2013 to 12/31/2013	Number of test results ≥5 mcg/dL	5,720	158	96
	Percent of test results ≥5 mcg/dL	3.9%	2.2%	3.1%
	Total tested for lead	143,838	6,820	3,102
1/1/2014 to 12/31/2014	Number of test results ≥5 mcg/dL	5,051	178	122
	Percent of test results ≥5 mcg/dL	3.5%	2.6%	3.9%
	Total tested for lead*	140,862	6,984	3,388
1/1/2015 to 12/31/2015	Number of test results ≥5 mcg/dL	4,792	160	112
Ī	Percent of test results ≥5 mcg/dL	3.4%	2.3%	3.3%
	Total tested for lead*	156,044	12,065	6,969
10/1/2015 to 10/14/2016	Number of test results ≥5 mcg/dL	5,612	215	174
Ī	Percent of test results ≥5 mcg/dL	3.6%	1.8%	2.5%
	Total tested for lead*	307,973	17,716	8,868
4/1/2014 to 10/14/2016	Number of test results ≥5 mcg/dL	11,407	388	277
	Percent of test results ≥5 mcg/dL	3.7%	2.2%	3.1%
	Total tested for lead*	126,730	10,413	6,113
1/1/2016 to 10/14/2016	Number of test results ≥5 mcg/dL	4,726	189	156
Ī	Percent of test results ≥5 mcg/dL	3.7%	1.8%	2.6%

Table 2. Incidence of elevated blood lead levels (≥ 5 mcg/dL) among children 6 to 17 years of age, 2010 – 2016

		Michigan	Genesee County	Flint 48501-48507
1/1/2010 to 12/31/2010	Total tested for lead	14,729	760	400
	Number of test results ≥5 mcg/dL	665	17	12
	Percent of test results ≥5 mcg/dL	4.5%	2.2%	3.0%
	Total tested for lead	12,959	959	499
1/1/2011 to 12/31/2011	Number of test results ≥5 mcg/dL	474	19	13
	Percent of test results ≥5 mcg/dL	3.7%	2.0%	2.6%
	Total tested for lead	12,710	1,259	561
1/1/2012 to 12/31/2012	Number of test results ≥5 mcg/dL	351	13	9
	Percent of test results ≥5 mcg/dL	2.8%	1.0%	1.6%
	Total tested for lead	11,428	1,109	505
1/1/2013 to 12/31/2013	Number of test results ≥5 mcg/dL	269	7	3
	Percent of test results ≥5 mcg/dL	2.4%	0.6%	0.6%
1/1/2014 to 12/31/2014	Total tested for lead	10,562	788	372
	Number of test results ≥5 mcg/dL	285	6	5
	Percent of test results ≥5 mcg/dL	2.7%	0.8%	1.3%
	Total tested for lead*	10,417	1,570	1,084
1/1/2015 to 12/31/2015	Number of test results ≥5 mcg/dL	254	10	8
	Percent of test results ≥5 mcg/dL	2.4%	0.6%	0.7%
	Total tested for lead*	24,049	9,967	7,596
10/1/2015 to 10/14/2016	Number of test results ≥5 mcg/dL	427	57	45
	Percent of test results ≥5 mcg/dL	1.8%	0.6%	0.6%
4/1/2014 to 10/14/2016	Total tested for lead*	37,042	10,739	7,903
	Number of test results ≥5 mcg/dL	680	60	47
	Percent of test results ≥5 mcg/dL	1.8%	0.6%	0.6%
	Total tested for lead*	21,220	9,178	6,990
1/1/2016 to 10/14/2016	Number of test results ≥5 mcg/dL	374	53	40
	Percent of test results ≥5 mcg/dL	1.8%	0.6%	0.6%

Table 3. Incidence of elevated blood lead levels (≥ 5 mcg/dL) among adults at least 18 years of age, 2010 – 2016

		Michigan	Genesee County	Flint 48501-48507
1/1/2010 to 12/31/2010	Total tested for lead	13,681	588	188
	Number of test results ≥5 mcg/dL	1,459	42	18
	Percent of test results ≥5 mcg/dL	10.7%	7.1%	9.6%
	Total tested for lead	13,112	528	132
1/1/2011 to 12/31/2011	Number of test results ≥5 mcg/dL	1,367	43	16
	Percent of test results ≥5 mcg/dL	10.4%	8.1%	12.1%
	Total tested for lead	12,914	539	148
1/1/2012 to 12/31/2012	Number of test results ≥5 mcg/dL	1,414	33	11
	Percent of test results ≥5 mcg/dL	10.9%	6.1%	7.4%
1/1/2013 to 12/31/2013	Total tested for lead	12,081	484	132
	Number of test results ≥5 mcg/dL	1,499	54	16
	Percent of test results ≥5 mcg/dL	12.4%	11.2%	12.1%
	Total tested for lead	12,574	436	111
1/1/2014 to 12/31/2014	Number of test results ≥5 mcg/dL	1,420	44	12
	Percent of test results ≥5 mcg/dL	11.3%	10.1%	10.8%
	Total tested for lead*	13,676	1,250	811
1/1/2015 to 12/31/2015	Number of test results ≥5 mcg/dL	1,367	48	21
	Percent of test results ≥5 mcg/dL	10.0%	3.8%	2.6%
	Total tested for lead*	35,951	19,641	15,570
10/1/2015 to 10/14/2016	Number of test results ≥5 mcg/dL	1,599	306	250
	Percent of test results ≥5 mcg/dL	4.4%	1.6%	1.6%
4/1/2014 to 10/14/2016	Total tested for lead*	51,915	20,230	15,724
	Number of test results ≥5 mcg/dL	3,081	351	260
	Percent of test results ≥5 mcg/dL	5.9%	1.7%	1.7%
	Total tested for lead*	32,481	18,891	15,004
1/1/2016 to 10/14/2016	Number of test results ≥5 mcg/dL	1,315	285	238
	Percent of test results ≥5 mcg/dL	4.0%	1.5%	1.6%

Table 4. Total incidence of elevated blood lead levels (≥ 5 mcg/dL), 2010 – 2016

		Michigan	Genesee County	Flint 48501-48507
1/1/2010 to 12/31/2010	Total tested for lead	184,424	8,401	4,218
	Number of test results ≥5 mcg/dL	11,878	365	260
	Percent of test results ≥5 mcg/dL	6.4%	4.3%	6.2%
	Total tested for lead	178,404	8,247	2,726
1/1/2011 to 12/31/2011	Number of test results ≥5 mcg/dL	9,412	314	211
	Percent of test results ≥5 mcg/dL	5.3%	3.8%	7.7%
	Total tested for lead	174,661	8,950	3,907
1/1/2012 to 12/31/2012	Number of test results ≥5 mcg/dL	8,597	256	150
	Percent of test results ≥5 mcg/dL	4.9%	2.9%	3.8%
	Total tested for lead	171,909	8,725	3,779
1/1/2013 to 12/31/2013	Number of test results ≥5 mcg/dL	7,488	219	115
	Percent of test results ≥5 mcg/dL	4.4%	2.5%	3.0%
1/1/2014 to 12/31/2014	Total tested for lead	166,974	8,044	3,585
	Number of test results ≥5 mcg/dL	6,756	228	139
	Percent of test results ≥5 mcg/dL	4.0%	2.8%	3.9%
	Total tested for lead*	164,955	9,804	5,283
1/1/2015 to 12/31/2015	Number of test results ≥5 mcg/dL	6,413	218	141
İ	Percent of test results ≥5 mcg/dL	3.9%	2.2%	2.7%
	Total tested for lead*	216,044	41,673	30,135
10/1/2015 to 10/14/2016	Number of test results ≥5 mcg/dL	7,638	578	469
	Percent of test results ≥5 mcg/dL	3.5%	1.4%	1.6%
	Total tested for lead*	396,930	48,685	32,495
4/1/2014 to 10/14/2016	Number of test results ≥5 mcg/dL	15,168	799	584
	Percent of test results ≥5 mcg/dL	3.8%	1.6%	1.8%
	Total tested for lead*	180,431	38,482	28,107
1/1/2016 to 10/14/2016	Number of test results ≥5 mcg/dL	6,415	527	434
	Percent of test results ≥5 mcg/dL	3.5%	1.4%	1.5%